

MM5

8

Purpose 8-3

Basic Equations of MM5 8-3

Physics Options in MM5 8-7

- Cumulus Parameterizations (ICUPA) 8-7

- PBL Schemes (IBLTYP) 8-8

- Explicit Moisture Schemes (IMPHYS) 8-10

- Radiation Schemes (IFRAD) 8-12

- Surface Schemes (ISOIL) 8-13

Interactions of Parameterizations 8-16

Boundary conditions 8-16

- Lateral boundary conditions (IBOUDY) 8-16

- Lower boundary conditions 8-17

- Upper boundary condition (IFUPR) 8-17

Nesting 8-17

- One-way nesting 8-17

- Two-way nesting 8-17

- Two-way nest initialization options (IOVERW) 8-17

- Two-way nesting feedback options (IFEED) 8-18

Four-Dimensional Data Assimilation (FDDA) 8-19

- Introduction 8-19

- FDDA Method 8-19

- Uses of FDDA 8-19

- Data used in FDDA 8-20

How to run MM5 8-21

- Compiling MM5 8-21

- Running MM5 8-21

- Running MM5 Batch Job on NCAR's IBM 8-22

Input to MM5 8-22

Output from MM5 8-23

MM5 Files and Unit Numbers 8-26

Configure.user Variables 8-27

Script Variables for IBM Batch Deck: 8-28

Namelist Variables 8-29

OPARAM 8-29

LPARAM 8-30

NPARAM 8-32

PPARAM 8-33

FPARAM 8-34

Some Common Errors Associated with MM5 Failure 8-35

MM5 tar File 8-36

Configure.user 8-37

Configure.user for PC 8-49

mm5.deck 8-51